DRAFT Outline for Healthcare Infection Control Practices Advisory Committee (HICPAC) guidance on public reporting of healthcareacquired infections (HAIs) and performance measures to prevent HAIs

- I. *Introduction: what is the scope and purpose of this guidance?*
 - a. Scope of the statement
 - i. Evidence-based review of public and private reporting for quality improvement of health care
 - ii. Guidance on methodology of public reporting of HAIs and relevant performance measures
 - b. Briefly review HICPAC's leadership role in setting federal guidance for health care organizations for infection control and prevention.
 - c. Goals for this document is to provide guidance on public disclosure of HAI to:
 - i. policymakers and organizations tasked with developing and implementing public reporting systems for HAIs
 - ii. health care organizations and providers who collect data in devising a reporting system
 - iii. consumers and patients who want information in order to protect their health and inform their decisions about healthcare.
 - d. Describe the process of developing the statement
 - i. Principles of transparency, accuracy, societal perspective (the long-run) and building upon what's been done by APIC, NQF, NASHP and others
 - ii. Adherence to evidence basis of all HICPAC policies
 - iii. Inclusion of stakeholders, especially state policy leaders
 - e. Describe the partners
 - i. Stakeholders in the process (consumers, states, health care providers, infection control community)
 - ii. Co-authors of the joint statement
 - 1. Proposed: CSTE, SHEA, APIC

- f. Executive summary of findings and recommendations
- II. Background: Why is it necessary for HICPAC to release this guidance on public reporting of HAIs now?
 - a. Briefly describe the patient safety improvement movement
 - i. IOM's recommendations, 1999
 - b. Briefly describe the increasing attention of the patient safety movement to hospital infections
 - i. IOM report on 20 national priorities for quality improvement
 - ii. NQF endorses measures of infection as patient safety measures
 - iii. Media reports and Consumer's Union website
 - c. Briefly describe the evolution of state reporting systems since the 1999 IOM report
 - i. NASHP reports
 - ii. NCSL survey
 - iii. List states that have passed or are considering public reporting for infection
 - d. Describe HICPAC's concerns that "if not done right, public reporting of HAIs could be damaging" [we need more clarity about what is meant here.]

- III. What are the key challenges and opportunities for providing guidance on performance measures and reporting systems for HAIs, as identified by HICPAC?
 - a. Challenges
 - i. Preventable fraction of health outcomes not precisely known, and related issues:
 - ii. No incentives to use national standardized measures in non-federal systems
 - iii. Underutilization of the information by stakeholders
 - iv. Risk adjustment methods could be better
 - v. Variability of capacities and interests in HAI prevention among health care organizations
 - vi. Unfunded mandates in era of serious fiscal constraints
 - vii. Cost-effective strategies for obtaining accurate data
 - viii. Differing visions/interests among stakeholders
 - ix. Unknown cost effectiveness and opportunity costs
 - 1. For example, will essential direct care staffing be decreased (hurting quality in other priority areas) in order to collect data?
 - 2. Evolving health care system issues create challenges for standardization and data collection, including:
 - a. Tracking patients across settings
 - b. Sicker patients on admission
 - c. Newer settings for surgical procedures
 - b. Opportunities
 - i. A number of effective, safe practices have been identified for infection control and prevention that are under-utilized.
 - ii. Evidence and experience supports the use of infection control and surveillance for reducing HAIs.
 - iii. Infrastructure for infection control and prevention exists in terms of CDC's partnership with hospital epidemiologists and infection control professionals (ICPs), but needs to be expanded to new settings.
 - iv. NQF has endorsed standardized measures for infection control and prevention.

- v. Public reporting may increase hospitals' attention to prevention of HAIs. Puts the focus on systems changes to support behavior and practices changes of healthcare workers (HCWs).
- vi. Facilitates working relationships between a variety of state and local stakeholders that may not have existed before.



- IV. What is the evidence from a systematic literature review on public and private reporting?
 - a. Review the outcomes of public and private reporting that are of interest to HICPAC, including:
 - i. Health outcomes
 - ii. Clinical performance measures
 - iii. QI activities
 - iv. ?Explain that the impact of public reporting on consumers' market behavior (as a mediating factor) is not the focus of this review
 - b. Pose two key questions for the systematic literature review
 - i. Are public or private reporting systems effective in achieving these outcomes?
 - ii. What characteristics of public or private reporting systems improve their effectiveness?
 - c. Explicate the 3 phases of the literature review
 - i. Keywords
 - ii. Inclusion and exclusion criteria for data abstraction and assessing quality of research
 - iii. Grade the evidence (HICPAC)
 - d. Results and conclusions from the systematic literature review of public and private reporting systems for improving healthcare performance

- V. Why are stakeholders looking to CDC for guidance on their public reporting systems?
 - a. CDC's role is national leader for surveillance and prevention of HAIs since the 1970's.
 - i. Surveillance and quality improvement
 - 1. Brief NNIS program description and principles
 - a. Purpose
 - i. Early problem identification and optimal resource allocation by ICPs
 - b. Voluntary, quality improvement focus
 - c. Confidentiality and protection of patient and hospital identity
 - d. National aggregated data reports
 - e. Trained data collectors (ie, ICPs) Evolution to web-based NHSN and knowledge management model
 - ii. Prevention Research
 - 1. Epicenters examples
 - iii. Prevention programs
 - 1. Prevent antimicrobial resistance campaigns
 - b. Consumer's Union model law names CDC's NNIS.

- VI. What guidance does HICPAC offer to designers of public and private reporting systems for HAIs?
 - a. Ensure comparability of HAIs among healthcare organizations
 - i. Major challenges
 - 1. Improving risk adjustment methods
 - 2. Maintaining accuracy of Data
 - a. Standardized (case) definitions
 - b. Denominator information
 - c. Data collection protocols
 - d. Case finding protocols
 - i. Validity checks
 - ii. Sensitivity, specificity and positive predictive value of case finding
 - b. Link reporting to recommended prevention interventions by:
 - i. Encouraging performance measures
 - ii. Involving ICPs and hospital epidemiologists in partnership with hospital administration and staff physicians and nurses to:
 - 1. Improve individual clinician practices
 - 2. Change hospital policies and protocols
 - 3. Promote innovative systems changes
 - 4. Assist or coordinate teams for quality and safety
 - iii. Ensuring access to and uses of data by participating organizations
 - c. Caveats in public reporting of HAIs
 - i. Use of these measures developed for one purpose (private reporting) may yield different results for public reporting.
 - ii. Public reporting of HCA measures may accelerate quality improvement activities. But unless the data are audited to ensure good quality control processes, these activities may not be well-grounded.
 - iii. Special problem of underreporting is anticipated in public reporting systems without auditing checks, especially if mandatory.
 - 1. However, the new group reporting function of NHSN will permit participating hospitals to send

- their data to third parties, such as state and local PHDs and QIOs.
- 2. Currently, CDC cannot directly share this data or the identity of NNIS hospitals with anyone as required by statutes, PHS Act 304d and 308d.
- iv. Other important problems for small or low volume hospitals where adverse outcomes are rare enough to diminish the reliability and comparability of rate data.
 - 1. Instead, process measures may be more helpful or the health outcomes measures may need to be redesigned.
- v. Risk adjustment
 - 1. Methods vary with purpose of the information derived from the data
 - a. Describe few example other than NNIS
 - 2. Methods used for private reporting may yield estimates of performance that are too imprecise for public reporting.
 - 3. There are problems in using counts of infections alone for reporting without specifying the portion of the at-risk population that are affected as a denominator.
 - 4. In particular, hospital-wide rate reporting has been discarded by NNIS since 1995.
 - 5. Numerator reporting only is particularly misleading. Most acceptable for sentinel events.